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FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEY

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FEB 25 1966

CURRENT SERIALS SECTION

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
and
STATE ENGINEER of UTAH

In cooperation with U.S. Forest Service, Bureau of Reclamation,
Utah Fish and Game Dept., Utah Agricultural Experiment Station,
U.S. National Park Service, U.S. Geological Survey; and other
Federal, State, and private organizations.

AS OF
FEB. 1, 1966

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES _____	MONTHLY (FEB.-MAY) _____	PORTLAND, OREGON _____	ALL COOPERATORS
BASIC DATA SUMMARY _____	OCTOBER 1 _____	PORTLAND, OREGON _____	ALL COOPERATORS
STATES			
ALASKA _____	MONTHLY (MAR.-MAY) _____	PALMER, ALASKA _____	ALASKA S.C.D.
ARIZONA _____	SEMI-MONTHLY _____ (JAN.15 - APR.1)	PHOENIX, ARIZONA _____	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
GOLORADO AND NEW MEXICO _____	MONTHLY (FEB.-MAY) _____	FORT COLLINS, COLORADO _____	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IOAHO _____	MONTHLY (JAN.-JUNE) _____	BOISE, IOAHO _____	IDAHO STATE RECLAMATION ENGINEER
MONTANA _____	MONTHLY (JAN.-JUNE) _____	BOZEMAN, MONTANA _____	MONT. AGR. EXP. STATION
NEVAOA _____	MONTHLY (JAN.-MAY) _____	RENO, NEVAOA _____	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON _____	MONTHLY (JAN.-JUNE) _____	PORTLAND, OREGON _____	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH _____	MONTHLY (JAN.-JUNE) _____	SALT LAKE CITY, UTAH _____	UTAH STATE ENGINEER
WASHINGTON _____	MONTHLY (FEB.-JUNE) _____	SPOKANE, WASHINGTON _____	WN. STATE DEPT. OF CONSERVATION
WYOMING _____	MONTHLY (FEB.-JUNE) _____	CASPER, WYOMING _____	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA _____	MONTHLY (FEB.-JUNE) _____	WATER RESOURCES SERVICE, DEPT. OF LANDS. FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA _____	MONTHLY (FEB.-MAY) _____	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

FEBRUARY 1, 1966

Report prepared by
GREGORY L. PEARSON - PAUL KEIL
and
Patricia Paramore

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
FEDERAL BLDG., ROOM 4012
SALT LAKE CITY UTAH 84111

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SOIL CONSERVATION SERVICE
SALT LAKE CITY, UTAH

PROSPECTIVE WATER SUPPLIES

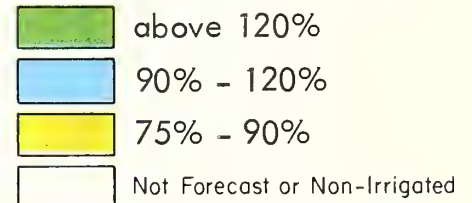
Based on Snow Surveys Made on
UTAH and BEAR RIVER WATERSHEDS

February 1, 1966

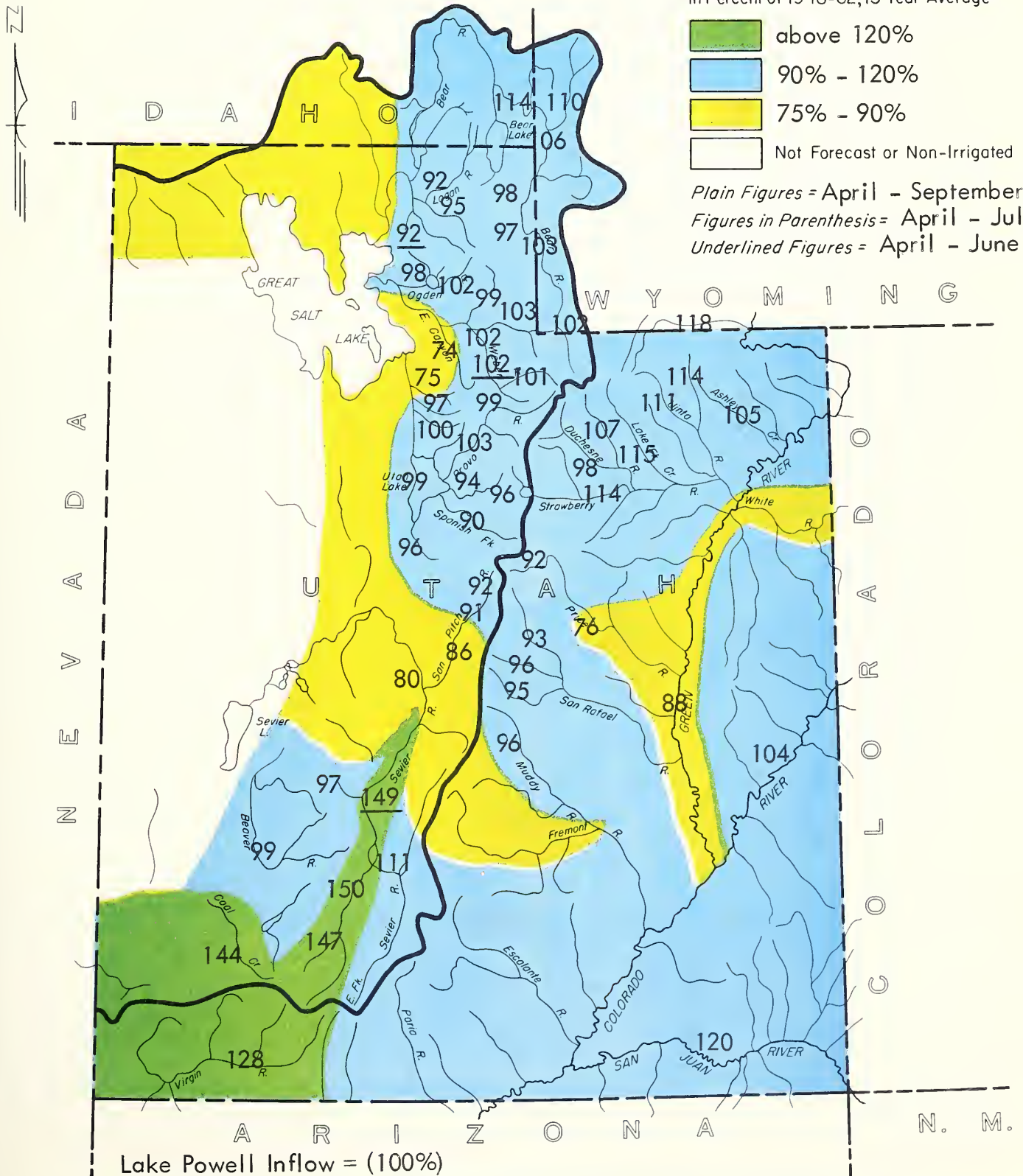
Approximate Date



FORECAST STREAM FLOW
in Percent of 1948-62, 15 Year Average



Plain Figures = April - September
Figures in Parenthesis = April - July
Underlined Figures = April - June



Lake Powell Inflow = (100%)

Flaming Gorge Inflow = (97%)

WATER SUPPLY OUTLOOK

as of

FEBRUARY 4, 1966

* * * * *

* The outlook for next summer's water supply remains fairly *
* good to excellent for most of Utah, in spite of dry Jan- *
* uary weather. Most watersheds have present prospects for *
* the April-September streamflow next summer to fall be- *
* tween 90% and 115% of the 1948-62 fifteen year average. *
* The April-July Inflow to Lake Powell on the Colorado *
* river is expected to be 7,700,000 acre feet, or average *
* flow. Inflow to Flaming Gorge on the Green river is *
* forecast at 1,100,000 acre feet, or 97% of average. *
* * * * *

Relatively dry January weather has lowered the prospects for the coming season's streamflow throughout most of the state. However, considering the excellent reservoir supplies carried over from last year, along with current streamflow prospects, the outlook for the summers water supply still remains good to excellent for most of Utah.

Increases in the snowpack during January varied from about one third to three fourths of usual amounts for the month.

The area where streamflow prospects are the highest still remains in southwestern Utah on the Virgin and Sevier rivers, and Coal Creek near Cedar City. The present snowpack is the highest it has been for this time of year since 1952. These streams are now expected to yield from about 130% to 175% of average flow. Inflow to the Sevier river from Kingston to Vermillion is forecast at 149% for the April-June period, with about 7,000 acre feet coming above the 400 second foot flow value. Below Vermillion, flow above 360 second feet will be about 1,500 acre feet plus whatever water may come from Gunnison reservoir. There is a good chance that the 89,280 acre feet of storage right in Sevier Bridge may be filled by the last of March.

The heavy snowpack near Cedar Breaks decreases rapidly to the north and east, with 5% to 15% above average water expected from Parowan Creek, the East Fork Sevier, Escalante and Paria rivers. This 5% to 15% above average condition also exists on most of the streams of the Uinta Basin.

The areas where forecasts are lowest - from about 75% to 90% of usual amounts - include East Canyon Creek near Morgan, Parley's Creek near Salt Lake, Price river near Heiner and streams near Farmington, Tooele, Fillmore, Salina, Ephraim and the Fremont river.

WATER SUPPLY OUTLOOK (continued)

Streamflow forecasts for all the rest of the State range between 90% and 105% of average. This includes the Bear river and all its tributaries, the Weber, Ogden, Provo and other streams draining into Utah Lake, the San Rafael, Muddy and upper San Pitch tributaries, Scofield reservoir on Price river, and the higher elevation streams near Salt Lake.

Carryover effects from last year's excellent runoff season will be felt this year. Reservoir storage supplies are excellent and base flow of the streams is higher than a year ago and above median in most of the state. Moisture in the soils underlying the snowpack is average or above.

Storage in some of the smaller reservoirs of central and northern Utah is particularly high. Scofield and Moon Lake reservoirs are at a record level for this time of year. Scofield has 281% of the 1948-62 average storage and is at 79% of capacity. Moon Lake has 240% of average and 87% of capacity. Excluding Bear and Utah Lakes, storage in the remaining reservoirs of central and northern Utah is 181% of average and 55% of capacity. Bear Lake is at 133% of average and 83% of capacity. Utah Lake has 118% of average. Storage in the reservoirs of the Sevier and Beaver rivers in the southwest is 110% of average and 45% of capacity.

Since there is still another 40% to 45% of the average season's maximum snowpack yet to come during February and March, a considerable change may yet take place in the water supply picture for next summer.

UTAH STREAMFLOW FORECASTS ^a (1,000 Ac. Ft.)

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE ^b	THIS YEAR AS PERCENT OF AVERAGE
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GREAT BASIN

BEAR RIVER SYSTEM

Bear at Harer, Idaho	295	Apr-Sept		258	114
Bear nr Randolph	100	Apr-Sept		94	106
Bear nr Ut-Wyo State Line	117	Apr-Sept	194	115	102
Bear nr Woodruff	120	Apr-Sept	241	117	103
Big Crk nr Randolph, Utah	8.4	Apr-Sept		8.6*	98
Blacksmith Fork nr Hyrum (4)	60	Apr-Sept	83	63	95
Little Bear nr Paradise	35	Apr-June	38	38	92
Logan nr Logan (3)	122	Apr-Sept	183	133	92
Smith's Fork nr Border, Wyoming	123	Apr-Sept	164	112	110
Woodruff Crk nr Woodruff, Utah	17	Apr-Sept		17.6*	97

WEBER-OGDEN RIVERS

Chalk Crk at Coalville	37	Apr-Sept	68	36	103
East Canyon Crk nr Morgan (7)	19	Apr-Sept	46	25.6	74
Lost Crk nr Croydon, Utah	18	Apr-Sept	30	18.1	99
Pineview Reservoir Inflow (8)	126	Mar-July	161	129	98
So Fork Ogden nr Huntsville	63	Apr-Sept	90	62	102
Rockport Reservoir Inflow (5)	119	Apr-July		117*	102
Weber nr Coalville (6)	130	Apr-Sept	222	128	102
Weber nr Oakley	100	Apr-June	128	100	100
	124	Apr-Sept	188	123	101

PROVO RIVER & UTAH LAKE

American Fork nr American Fork	32	Apr-Sept	42	33	97
Hobble Crk nr Springville	20	Apr-Sept		21.2	94
Payson Creek nr Payson	7	Apr-Sept	--	7.3	96
Provo nr Hailstone (10)	108	Apr-Sept		109	99
Provo at Vivian Park (11)	148	Apr-Sept	--	144	103
Spanish Fork at Thistle	36	Apr-Sept	48	40	90
Strawberry Reservoir Inflow (9)	48	Apr-Sept		50	96
Utah Lake Inflow	280	Apr-Sept	381	282	99

JORDAN RIVER & SALT LAKE

Big Cottonwood nr SLC	38	Apr-Sept	48	39	97
Little Cottonwood Crk nr SLC	38	Apr-Sept	53	38	100
Parley's Crk nr SLC	10	Apr-Sept	19	13.3	75

(1) Measured flow plus change in storage in Woodruff Narrows Reservoir. (2) Measured flow plus change in storage in Porcupine Reservoir. (3) Includes U.P. & L. Co. tailrace and Logan, Hyde Park & Smithfield Canal. (4) Above Utah Power & Light Company's dam. (5) Observed flow Weber River near Wanship, Utah, plus change in storage in Wanship Reservoir, plus diversion by Weber-Provo Canal. (6) Includes diversion by Weber-Provo Canal and change in storage in Wanship Reservoir. (7) Observed flow plus change in storage in East Canyon Reservoir. (8) Inflow record as computed by U.S. Bureau of Reclamation. (9) Change in storage plus diversion thru Strawberry tunnel. (10) Observed flow minus diversions thru Duchesne tunnel and Weber-Provo Canal. (11) Observed flow plus change in storage in Deer Creek reservoir, minus diversions thru Duchesne tunnel & Weber-Provo Canal, plus diversion thru Salt Lake Aqueduct.

UTAH STREAMFLOW FORECASTS " (1,000 Ac. Ft.)

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE ^b	THIS YEAR AS PERCENT OF AVERAGE
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SEVIER RIVER

Clear Crk nr Sevier(abv.Div.)	12.5	Apr-June		12.9*	97
East Fork Sevier nr Kingston (12)	18	Apr-June		15.8	114
	22	Apr-Sept		19.8	111

Inflow

Kingston to Vermillion Dam (See	58	Apr-June		39	149
Vermillion Dam to Gunnison Note, below)	57	Mar-June		59	97
Salina Crk at Salina (14)	7	Apr-June		8.3*	84
Sevier nr Circleville	60	Apr-Sept		40*	150
Sevier nr Gunnison a(See note below)	44	Apr-Sept	68	55	80
Sevier at Hatch	46	Apr-June		32	144
	66	Apr-Sept		45	147
Sevier nr Kingston	37	Apr-June		21.0	176
	42	Apr-Sept		25.5	165
Sevier below Piute Dam (13)	63	Apr-Sept		45	140

SAN PITCH RIVER

Ephraim Creek nr Ephraim	13	Apr-Sept		15.2	86
Pleasant Crk nr Mt. Pleasant	8.9	Apr-Sept		9.7*	92
Twin Crk nr Mt. Pleasant	4.3	Apr-Sept		4.7*	91

BEAVER RIVER

Beaver nr Beaver	17.5	Apr-June	16.5	18.0	97
	24	Apr-Sept	28.4	24.3	99
Rockyford Reservoir Inflow(15)	5	Apr-June		7.8	64

COAL CREEK

Coal Crk nr Cedar City	23	Apr-Sept		16.0	144
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COLORADO RIVER BASIN

GREEN RIVER TRIBUTARIES IN UTAH

FLAMING GORGE TO DUCHESNE RIVER

Ashley Creek nr Vernal	59	Apr-Sept		56	105
Henry's Fork at Linwood	40	Apr-Sept		34	118

Note: Any flow from the Gunnison reservoir will be over and above this amount.

(12) Observed flow plus change in storage in Otter Creek Reservoir. (13) Observed flow plus change in storage in Otter Crk & Piute Reservoirs. (14) Gage is below diversions near Salina. (15) Observed flow at Rockyford Dam, corrected for change in storage in Rockyford Reservoir. (16) Observed flow plus diversion through Duchesne Tunnel.

UTAH STREAMFLOW FORECASTS ^a (1,000 Ac. Ft.)

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE ^b	THIS YEAR AS PERCENT OF AVERAGE
<u>DUCHESNE RIVER</u>					
Duchesne at Provo River (Trail nr Hanna)	34	Apr-Sept		35*	97
Duchesne nr Tabiona (16)	112	Apr-Sept		114	98
Lakefork below Moon Lake (17)	83	Apr-Sept		72	115
Rock Crk nr Mtn. Home	109	Apr-Sept		102	107
Strawberry at Duchesne	82	Apr-Sept		72	114
Uinta nr Neola	105	Apr-Sept		95	111
Whiterocks nr Whiterocks	72	Apr-Sept		63	114
Yellowstone nr Altonah	81	Apr-Sept		73	111
<u>PRICE RIVER</u>					
Gooseberry Crk nr Scofield	10.7	Apr-Sept	15.1	11.9	90
Price nr Heiner (18)	52	Apr-Sept		68	76
Scofield Reservoir Inflow (18)	34	Apr-Sept		37	92
<u>SAN RAFAEL RIVER</u>					
Cottonwood Crk nr Orangeville	53	Apr-Sept	96	55	96
Ferron Crk nr Ferron	40	Apr-Sept	63	42	95
Huntington Crk nr Huntington	52	Apr-Sept	85	56	93
<u>MUDDY RIVER</u>					
Muddy Creek nr Emery	22	Apr-Sept	31	22.8*	96
<u>VIRGIN RIVER</u>					
Virgin at Virgin	55	Apr-June		43	128
<u>UPPER COLORADO BASIN</u>					
Colorado nr Cisco, Utah	3950	Apr-Sept	5442	3789	104
Flaming Gorge Inflow (19)	1100	Apr-July	1251	1129	97
Lake Powell Inflow (8)	7700	Apr-July	11810	7692	100
Green at Green River, Ut. (19)	2950	Apr-Sept		3368	88
San Juan nr Bluff, Utah (20)	1410	Apr-Sept	2090	1172	120

(17) Observed flow plus change in storage in Moon Lake Reservoir. (18) Observed flow plus change in storage in Scofield Reservoir. (19) Observed flow plus change in storage in Flaming Gorge, Fontenelle and Big Sandy Reservoirs. (20) Observed flow plus change in storage in Navajo Reservoir. (21) Observed flow at Lee's Ferry plus change in storage in Flaming Gorge, Navajo, Lake Powell, Fontenelle and Big Sandy.

GENERAL FOOTNOTES

(a) Runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. The discharge data is taken from preliminary records of the U.S. Geological Survey. (b) 1948-62, 15 year period. *Partly estimated.

RESERVOIR STORAGE (1,000 Ac. Ft.)

BASIN or STREAM	RESERVOIR	USABLE CAPACITY	MEASURED (FIRST OF MONTH)		
			THIS YEAR	LAST YEAR	AVERAGE ^a
<u>GREAT BASIN</u>					
<u>Bear River</u>	Bear Lake	1421.0	1172.6	905.7	883.7
	Woodruff Narrows	26.5	17.7	17.2	- -
<u>Little Bear</u>	Hyrum	15.3	10.6	6.7	10.1
	Porcupine	11.3	2.5	2.2	- -
<u>Ogden</u>	Causey	7.1	1.1	- -	- -
	Pineview	110.0	71.2	71.4	8.9
<u>Weber</u>	East Canyon	28.7	2.2	0.0	12.4
	Echo	73.9	59.0	50.7	26.8
	Rockport	59.1	48.1	42.4	15.1*
	Willard Bay	215.0	80.9	52.0	- -
<u>Provo</u>	Deer Creek	149.7	111.9	118.3	91.4
<u>Spanish Fork</u>	Strawberry	270.0	115.2	61.5	133.0
<u>Utah Lake</u>	Utah Lake (b)	1149.0	696.5	403.0	542.6
<u>Sevier River</u>	Otter Creek	52.5	26.4	15.1	23.3
	Piute	74.0	39.2	24.8	31.7
	Sevier Bridge	236.0	96.2	41.3	92.2
<u>Beaver River</u>	Rocky Ford	23.3	11.9	6.9	10.7
<u>COLORADO RIVER DRAINAGE</u>					
<u>Ashley Creek</u>	Steinaker	33.3	19.1	14.1	- -
<u>Lake Fork</u>	Moon Lake	35.8	31.2	10.0	13.0
<u>Price River</u>	Scofield	65.8	51.9	13.0	18.5
<u>Green</u>	Flaming Gorge	3789.0 d	2414.3	968.7	- -
<u>San Juan</u>	Navajo	1709.0 d	283.6	329.8	- -
<u>Colorado</u>	Lake Powell	27000.0 d	8804.0	6197.0	- -

* - Average for 1957-62 inclusive.

All data contained in this table supplied by the U.S. Geological Survey.

(a) 1948-62 average. (b) Active capacity taken at 3.1 feet above compromise point. (c) Partly estimated.

(d) Total capacity reported.

COMPARISON of SNOW COVER

RIVER BASIN or TRIBUTARY WATERSHED	NO. of COURSES AVERAGE	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	AVERAGE *

GREAT BASIN

Smith's Fork-Bear River(Wyo)	4	44	88
Mink Creek - Cub River	3	45	73
Logan River	6	55	89
Blacksmith Fork	6	72	96
Malad River (Idaho)	2	41	74
Ogden River	5	66	91
Weber River above Echo Dam	8	49	83
Chalk Creek - Coalville	2	63	112
East Canyon Creek	3	49	83
Farmington Creek	2	--	74
Salt Lake Area	4	48	83
Tooele Area	1	54	73
American Fork River	2	66	88
Provo River above Vivian Park	7	56	89
Strawberry Reservoir Valley	3	67	92
Spanish Fork River	4	50	75
Mt. Nebo Area	2	57	80
Sevier River above Panguitch	3	127	137
East Fork Sevier River	4	143	103
Salina Creek	2	40	66
Mt. Pleasant Area	2	58	78
Ephraim Creek	2	43	67
Beaver River	3	78	93
Coal Creek-Cedar City	3	170	168

COLORADO RIVER BASIN

Duchesne-Strawberry Rivers	5	61	97
Lakefork River	2	75	120
Whiterocks-Uintah Rivers	3	91	112
Price River	5	58	91
San Rafael Tributaries	6	51	96
Escalante River	3	145	100
Virgin River	4	144	145

* Actual or Estimated 1948-62, 15 year Average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

GREAT BASIN DRAINAGE

UPPER BEAR RIVER
(Above Harer, Idaho)

Big Park	10G11	8700	1/28	39	11.2	25.0	10.3*
CCC Camp x	10G7	7500	1/28	28	5.4	13.4	7.8
Monte Cristo R.S.	11H12	8960	1/28	52	15.8	25.0	16.0*
Piney LaBarge x	10G10	8820	1/29	37	11.1	28.5	12.4*
Salt River Summit x	10G8	7900	1/27	35	8.5	16.6	10.2*
Trial Lake x	10J8	9800	1/28	49	14.6	28.4	16.5*

LOWER BEAR RIVER
(Below Harer, Idaho)

Beaver Crk-Skunk Crk.x	11H14	7150	1/28	30	7.9	10.8	8.0*
Christensen Ranch	11G11	5600	1/28	22	5.1	7.5	6.4*
Cub River R.S.	11G12	5400	1/31	23	5.0	6.6	6.5*
Dry Basin A	11G13	7900	1/29	72	18.2A	37.8A	- -
Dry Bread Pond x	11H13	8230	1/28	43	12.2	15.7	11.3*
Dry Creek Flat	12G4	6350	1/31	17	4.0	8.0	4.7*
Emigrant Summit	11G6	7700	1/28	45	11.4	29.4	- -
Garden City Summit	11H7	7600	1/26	43	11.3	17.0	12.5*
Horseshoe Basin A	11G14	8000	1/29	48	12.1A	30.9	- -
Klondike Narrows	11H1	7400	1/26	46	12.0	22.3	13.5*
Liberty Spring	11G15	8420	1/29	73	18.5A	46.8	- -
Monte Cristo R.S.	11H12	8960	1/28	52	15.8	25.0	16.0*
Oxford Mountain	12G3	6800	1/31	21	4.4	12.0	6.2*
Steep Hollow #1	11H27	8500	1/26	74	21.2	42.4	23.0*
Steep Hollow #2	11H28	7700	1/26	58	15.6	34.0	17.5*
Strawberry Creek	11G9	5800	1/28	22	5.0	11.2	7.7*
Strawberry Mink Divide	11G10	6800	2/4	37	9.2	24.4	13.5*
Tony Grove R.S.	11H3	6250	1/26	30	7.1	12.4	8.4
Willow Flat	11G4	6100	2/1	34	7.8	15.4	9.7*

OGDEN RIVER

Beaver Crk-Skunk Crk.	11H14	7150	1/28	30	7.9	10.8	8.0*
Ben Lomond(lower)	11H9	5850	1/27	36	6.7	11.9	10.7*
Ben Lomond Peak	11H8	8000	1/27	63	19.4	33.5	22.0*
Ben Lomond Trail	11H30	6000	1/27	39	8.3	13.8	- -
Cutler Creek	11H29	6780	1/27	52	13.2	26.2	- -
Dry Bread Pond	11H13	8230	1/28	43	12.2	15.7	11.3*
Monte Cristo R.S.	11H12	8960	1/28	52	15.8	25.0	16.0*
Sagebrush Flat	11H15	6300	1/27	18	3.8	3.9	4.2*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation; Water content estimated. * Estimated 1948-62, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

WEBER RIVER

Beaver Creek R.S.	11J24	7500	1/28	20	4.9	10.3	6.2*
Chalk Creek #2	11J2	8000	1/26	36	9.7	15.1	8.5*
Chalk Creek #3	11J3	7500	1/26	22	5.2	8.4	4.7*
Farmington Canyon(lower)	11J12	6950	1/28	35	9.2	- -	15.0*
Farmington Canyon(upper)	11J11	8000	1/28	51	14.6	- -	16.8*
Lamb's Canyon x	11J14	6600	1/27	27	7.0	15.6	9.5*
Parley's Canyon Smt.	11J15	7500	1/29	33	8.4	21.4	11.6*
Silver Lake x	11J16	8725	1/28	53	16.5	26.4	16.0
Smith & Morehouse	11J4	7600	1/27	31	8.7	13.3	7.8*
Trial Lake x	10J8	9800	1/28	49	14.6	28.4	16.5*

PROVO RIVER & UTAH LAKE

Camp Altamont	11J20	7300	1/28	29	9.0	15.4	11.9
Clear Creek Ridge #2	11K22	8000	1/26	31	7.2	14.4	8.9*
Clear Creek Ridge #3	11K23	6600	1/26	17	3.1	8.9	5.2*
Daniels-Strawberry Smt.	11J23	8000	1/27	35	9.4	13.2	10.1
East Portal	11J7	7560	1/31	29	7.8	11.4	8.1
Payson R.S.	11K1	8050	1/27	35	10.2	14.8	10.5*
Rock Bridge	11K2	6750	1/27	21	4.9	10.9	7.8*
Soapstone R.S.	11J25	7800	1/28	28	6.9	16.6	8.0*
South Fork R.S.	11J19	6100	1/28	8	2.8	5.5	5.9
Strawberry Divide	11J8	8000	1/31	41	11.7	18.8	13.3
Timpanogos Cave Camp	11J18	5500	1/27	4	0.5	3.3	2.8
Timpanogos Divide	11J21	8140	1/28	51	17.5	24.1	17.6
Trial Lake	10J8	9800	1/28	49	14.6	28.4	16.5*

JORDAN RIVER & TOOELE VALLEY

Lamb's Canyon	11J14	6600	1/27	27	7.0	15.6	9.5*
Middle Canyon	12J3	7000	1/28	22	6.2	11.4	8.5*
Mill D South Fork	11J10	7400	1/28	37	10.0	21.1	12.0*
Parley's Canyon Smt. x	11J15	7500	1/29	33	8.4	21.4	11.6*
Silver Lake	11J16	8725	1/28	53	16.5	26.4	16.0

UPPER SEVIER RIVER(South of Richfield, Utah)

Big Flat x	12L7	10290	1/27	32	9.2	13.1	10.6*
Bryce Canyon	12M8	8000	1/28	19	4.3	3.1	3.8*
Duck Creek R.S.	12M4	8560	1/31	47	13.0	10.0	9.0*
Harris Flat R.S.	12M5	7700	1/31	28	6.2	6.2	5.7*
Long Valley Junction x	12M6	7500	1/31	Trace		2.6	3.2*
Midway Valley	12M2	9800	1/31		19.9	13.1	12.5*
Widtsoe-Escalante Smt.	11M1	9500	1/31	23	5.5	4.4	5.1
Widtsoe-Escalante #2	11M2	9500	1/31	28	6.4	4.7	6.8*
Widtsoe-Escalante #3	11M3	9500	1/31	35	9.0	5.2	9.3*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1948-62, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

LOWER SEVIER RIVER
(Including San Pitch River)

Farnsworth Lake	11L1	9900	1/27	27	5.8	15.4	9.5*
G.B.R.C. Headquarters	11K11	8700	1/28	26	5.3	14.5	9.0*
G.B.R.C. Meadows	11K10	10000	1/28	39	10.7	22.4	14.5*
Gooseberry R.S.	11L2	8400	1/27	20	4.2	10.0	5.9*
Gooseberry Reservoir x	11K4	8700	1/26	35	8.7	15.9	11.8*
Mammoth R.S.-Ctnwd. Crk.	11K3	8800	1/26	39	10.0	16.6	12.2*
Shingle Mill	12L11	6200	1/28	14	2.4	5.0	- -

BEAVER RIVER

Big Flat	12L7	10290	1/27	32	9.2	13.1	10.6*
Merchant's Valley	12L9	8200	1/27	23	5.7	6.9	5.8*
Otter Lake	12L8	9300	1/27	30	8.1	10.0	8.7*

COAL CREEK

CSU Ranch	12M17	8200	1/31	36	8.2	New Course	
Midway Valley x	12M2	9800	1/31	70	19.9	13.1	12.5*
Urie Flat	12M10	8450	1/31	33	8.2	5.1	4.7*
Webster Flat	12M3	9200	1/31	60	16.7	8.5	9.8*

PAROWAN CREEK

Birch Crossing	12M16	8100	1/28	16	3.7	New Course	
Brian Head	12M14	10400	1/28	44	13.5	New Course	
Ed Ward Flat	12M12	8300	1/28	21	5.1	- -	- -
Tall Poles	12M15	8800	1/28	32	8.2	New Course	
Yankee Reservoir	12M11	8700	1/28	26	6.3	- -	- -

COLORADO RIVER DRAINAGE

UPPER GREEN RIVER IN UTAH
(Tributaries above Flaming Gorge)

Buck Pasture A	10J23	9700	Delayed Report			21.0A	- -
Henry's Fork A	10J24	10200	Delayed Report			11.0A	- -
Steel Creek Park A	10J20	9900	Delayed Report			17.5A	- -

DUCHESNE RIVER

Ashley Twin Lakes A	9J11	10500	Delayed Report			13.5A	- -
Atwood Basin A	10J27	10250	Delayed Report			- -	- -
Chepeta-Whiterocks LksA	9J9	10300	Delayed Report			- -	- -
Daniels-Strawberry Smt. x	11J23	8000	1/27	35	9.4	13.2	10.1
East Portal x	11J7	7560	1/31	29	7.8	11.4	8.1
Five Point Lake A	10J26	11000	Delayed Report			- -	- -
Indian Canyon	10K1	9100	1/28	36	10.2	13.7	8.2
Julius Park	9J6	9800	1/28	36	9.2	10.3	8.9*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1948-62, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

DUCHESNE RIVER - Continued

Lakefork Basin A	10J25	11100	Delayed Report			- -	- -
Lakefork Mountain	10J10	10500	2/1	34	8.3	11.2	7.3*
Lakefork Mountain #2	10J11	8900	2/1	26	6.5	8.7	5.2*
Lakefork Mountain #3	10J12	8100	2/1	24	5.5	7.3	4.2*
Mosby Mountain	9J5	9500	1/28	32	8.1	9.2	6.8*
Paradise Park	9J3	10100	1/28	37	9.7	10.1	8.4*
Reynolds Park A	9J10	10400	Delayed Report			- -	- -
Soapstone R.S. x	11J25	7800	1/28	28	6.9	16.6	8.0*
Strawberry Divide	11J8	8000	1/31	41	11.7	18.8	13.3
Trial Lake	10J8	9800	1/28	49	14.6	28.4	16.5*
Windy Park A	9J12	9400	Delayed Report			7.3	- -

PRICE RIVER

Clear Creek Ridge #2 x	11K22	8000	1/26	31	7.2	14.4	8.9*
Dry Valley Divide	11K8	7800	1/27	25	6.0	11.7	7.0*
Gooseberry Reservoir	11K4	8700	1/26	35	8.7	15.9	11.8*
Indian Canyon x	10K1	9100	1/28	36	10.2	13.7	8.2
Jones Ranch	11K7	7600	1/27	19	4.0	8.0	5.1*
Mammoth R.S.-Ctnwd. Crk.x	11K3	8800	1/26	39	10.0	16.6	12.2*
Mud Creek #2	11K33	8300	1/27	31	7.4	14.9	8.1*

SAN RAFAEL RIVER

Buck Flat	11K31	9400	1/26	30	7.2	16.6	8.4*
G.B.R.C. Meadows x	11K10	10000	1/28	39	10.7	22.4	14.5*
Gooseberry Reservoir	11K4	8700	1/26	35	8.7	15.9	11.8*
Red Pine Ridge	11K28	9400	1/31	39	9.8	18.7	9.8*
Rush Pond	11K38	9800	1/26	29	6.8	14.9	7.8*
Upper Joe's Valley	11K29	8800	1/31	26	5.8	12.8	5.3*
Wrigley Creek	11K32	9000	1/26	29	7.0	11.1	5.8*

FREMONT RIVER

Farnsworth Lake x	11L1	9900	1/27	27	5.8	15.4	9.5*
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ESCALANTE RIVER

Widtsoe-Escalante Smt.	11M1	9500	1/31	23	5.5	4.4	5.1
Widtsoe-Escalante #2	11M2	9500	1/31	28	6.4	4.7	6.8*
Widtsoe-Escalante #3	11M3	9500	1/31	35	9.0	5.2	9.3*

VIRGIN RIVER

Duck Creek R.S.	12M4	8560	1/31	47	13.0	10.0	9.0*
Harris Flat R.S.	12M5	7700	1/31	28	6.2	6.2	5.7*
Long Valley Junction	12M6	7500	1/31	Trace	Trace	2.6	3.2*
Midway Valley x	12M2	9800	1/31	70	19.9	13.1	12.5*
Webster Flat	12M3	9200	1/31	60	16.7	8.5	9.8*

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation; Water content estimated. * Estimated 1948-62, 15 year average.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948-62 AVERAGE	THIS YEAR	1948-62 AVERAGE	PERCENT OF AVERAGE

GREAT BASIN DRAINAGE

UPPER BEAR RIVER (Above Harer, Idaho)

Chalk Creek #2*	8000	1/26	- -	- -	9.39	10.65	88
Chalk Creek #3*	7500	1/26	- -	- -	7.70	- -	--
Monte Cristo #2	8960	1/28	- -	- -	15.96	18.10	88
Salt River Summit	7900	1/27	3.00	3.65	8.10	11.40	71
Trial Lake*	9800	1/28	2.43	4.50	13.68	15.55	88

LOWER BEAR RIVER (Below Harer, Idaho)

Dry Bread Pond	8230	1/28	- -	- -	14.09	13.95	101
Garden City Summit	7600	1/26	2.52	3.85	11.13	12.10	92
Klondike Narrows	7400	1/26	3.93	4.80	14.50	15.00	97
Monte Cristo #2	8960	1/28	- -	- -	15.96	18.10	88
Tony Grove R.S.	6250	1/26	2.39	- -	11.49	- -	--
Willow Flat	6100	2/1	2.61	- -	12.54	15.40	82

OGDEN RIVER

Ben Lomond(lower)	5850	1/27	5.78	5.70	16.90	16.30	104
Ben Lomond Trail	6000	1/27	6.72	5.92	17.98	17.05	105
Causey Dam	5500	1/28	3.72	- -	8.44	- -	--
Dry Bread Pond	8230	1/28	- -	- -	14.09	13.95	101
Monte Cristo #2*	8960	1/28	- -	- -	15.96	18.10	88
Sagebrush Flat	6300	1/28	- -	- -	8.93	9.35	96

WEBER RIVER

Chalk Creek #2	8000	1/26	- -	- -	9.39	10.65	88
Chalk Creek #3	7500	1/26	- -	- -	7.70	- -	--
Farmington Guard Sta.(1)	7500	1/28	1.95	5.60a	15.19	19.00a	80
Farmington Rice (1)	7000	1/28	1.87	5.13a	13.75	17.12a	80
Parley's Canyon Smt.	7500	1/29	2.41	4.05	9.74	13.50	72
Silver Lake(Brighton)*(2)	8725	1/31	2.61	5.39a	16.35	18.37a	89
Smith & Morehouse	7600	1/27	4.30	3.60	10.82	11.90	91
Trial Lake*	9800	1/28	2.43	4.50	13.68	15.55	88

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. *Adjacent drainage.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948-62 AVERAGE	THIS YEAR	1948-62 AVERAGE	PERCENT OF AVERAGE

PROVO RIVER & UTAH LAKE

Clear Creek Ridge #2	8000	1/26	- -	- -	8.75	11.00	80
Daniels-Strawberry Smt.	8000	1/27	1.26	3.50	10.61	11.85	90
East Portal Ridge	7800	1/31	2.25	- -	10.07	- -	--
Payson R.S.	8050	1/27	3.72	3.50	9.99	11.65	86
Soapstone R.S.	7800	1/28	1.80	3.15	9.08	10.50	86
Strawberry Res.-E.Portal	7606	1/31	1.25	2.24a	6.67	7.22a	92
Timpanogos Divide	8200	1/28	2.37	5.53a	17.53	17.26a	102
Trial Lake	9800	1/28	2.43	4.50	13.68	15.55	88

JORDAN RIVER & TOOELE VALLEY

Middle Canyon	7000	1/28	1.02	3.10	8.72	11.30	77
Mt. Dell Dam (2)	5500	1/31	0.81	2.15a	7.44	8.26a	90
Parley's Canyon Smt.	7500	1/29	2.41	4.05	9.74	13.50	72
Silver Lake(Brighton)(2)	8725	1/31	2.61	5.39a	16.36	18.37a	89

SEVIER RIVER ABOVE RICHFIELD

Big Flat	10290	1/27	- -	- -	8.85	11.20	79
Cedar Breaks	10390	1/28	3.43	- -	15.85	13.55	117
Duck Creek R.S.	8560	1/31	1.70	3.65	17.02	12.00	142
Webster Flat*	9200	1/31	4.21	4.00	18.56	12.90	144
Widtsoe-Escalante #3	9500	1/31	1.54	1.95	9.40	8.20	115
Widtsoe R.S.	7600	1/31	0.67	0.75a	3.30	3.46a	95

SEVIER RIVER BELOW RICHFIELD (Including San Pitch River)

Farnsworth Lake	9900	1/27	1.84	3.15	6.52	11.15	58
G.B.R.C. Headquarters(1)	8700	1/28	1.41	3.40a	7.30	11.16a	65
G.B.R.C. Meadows(1)	10000	1/28	2.15	3.56a	9.94	12.31a	81
G.B.R.C. Oaks (1)	7655	1/28	0.91	2.14a	4.72	7.73a	61
Gooseberry R.S. (1)	7800	1/27	1.38	1.85	4.99	7.65	65
Gooseberry Reservoir*	8700	1/26	2.63	3.60	9.77	11.75	83
Mammoth R.S. #2*	8600	1/26	3.03	3.55	9.67	11.65	83
Shingle Mill	6200	1/28	1.71	2.55	6.52	9.05	72

BEAVER RIVER

Beaver Canyon P.H. (2)	7275	1/31	1.07	2.07a	5.32	5.87a	91
Big Flat	10290	1/27	- -	- -	8.85	11.20	79
Merchant Valley	8650	1/27	- -	- -	7.38	- -	--

COAL CREEK

Cedar Breaks	10390	1/28	3.43	- -	15.85	13.55	117
Webster Flat*	9200	1/31	4.21	4.00	18.56	12.90	144

PAROWAN CREEK

Tall Poles	8800	1/28	2.37	- -	8.98	- -	- -
Yankee Reservoir	8700	1/28	1.88	- -	7.44	7.35	101

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PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
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COLORADO RIVER DRAINAGE

UPPER GREEN RIVER IN UTAH (Tributaries above Flaming Gorge)

Burnt Creek	7900	1/31	1.52	- -	5.12	- -	--
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GREEN RIVER TRIBUTARIES BETWEEN FLAMING GORGE & DUCHESNE RIVER

Grizzly Ridge	8500	1/31	1.54	- -	8.83	- -	--
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DUCHESNE RIVER

Daniels-Strawberry Smt.*	8000	1/27	1.26	3.50	10.61	11.85	90
East Portal Ridge*	7800	1/31	2.25	- -	10.07	- -	--
Indian Canyon	9100	1/28	0.50	3.35	10.84	10.15	107
Julius Park	9800	No Report		2.40		9.80	
Lakefork Mountain	10500	2/1	- -	- -	8.63	9.15	94
Moon Lake	8150	1/30	0.05	1.67a	6.05	5.92a	102
Mosby Mountain	9500	1/28	- -	- -	7.32	- -	--
Paradise Park	10100	No Report		2.85		10.50	
Soapstone R.S.*	7800	1/28	1.80	3.15	9.08	10.50	86
Strawberry Res.-E. Portal*	7606	1/31	1.25	2.24a	6.67	7.22a	92
Trial Lake*	9800	1/28	2.43	4.50	13.68	15.55	88

PRICE RIVER

Clear Creek Ridge #2*	8000	1/26	- -	- -	8.75	11.00	80
Gooseberry Reservoir	8700	1/26	2.63	3.60	9.77	11.75	83
Indian Canyon	9100	1/28	0.50	3.35	10.84	10.15	107
Mammoth R.S. #2	8600	1/26	3.03	3.55	9.67	11.65	83
Mud Creek	8300	1/27	1.45	3.15	7.95	10.30	77

SAN RAFAEL RIVER

Buck Flat	9400	1/26	- -	- -	7.60	10.15	75
G.B.R.C. Meadows*(1)	10000	1/28	2.15	3.56a	9.94	12.31a	81
Gooseberry Reservoir	8700	1/26	2.63	3.60	9.77	11.75	83
Orange Olsen		1/31	- -	- -	3.95	- -	--
Red Pine Ridge	9400	1/31	- -	- -	9.80	12.10	81

FREMONT & ESCALANTE RIVERS

Farnsworth Lake*	9900	1/27	1.84	3.15	6.52	11.15	58
Widtsoe-Escalante #3	9500	1/31	1.54	1.95	9.40	8.20	115

VIRGIN RIVER

Buck Creek R.S.	8560	1/31	1.70	3.65	17.02	12.00	142
Webster Flat	9200	1/31	4.21	4.00	18.56	12.90	144

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Agencies Cooperating in Utah Snow Surveys

U. S. GOVERNMENT AGENCIES

U. S. Department of Agriculture
Soil Conservation Service
Forest Service
U. S. Department of Commerce
Weather Bureau
U. S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service

STATE AGENCIES

Utah Agricultural Experiment Station
Utah Fish and Game Department
Utah State Engineer
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner
Utah Water and Power Board

MUNICIPALITIES

Manti
Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

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with the Snow Survey"*